DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-020917 Address: 333 Burma Road **Date Inspected:** 21-Feb-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Mr. Oiu wen **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Weld Procedures Followed:** N/A **Electrode to specification:** Yes No Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

Summary of Items Observed:

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG Assembly Bay- 14.

The following Non Destructive Testing (NDT) Inspection was carried out as per the ZPMC submitted Notification No. 08351 and 08353.

Magnetic Particle Testing (MT)

This QA performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated a MT report for this date. The members are identified as OBG casting Components. Total number of castings MT Tested: 11 No's. The casting designations inspected were as follows:

1. APBB1-088-11,088-3,088-16,107-15,087-6,100-4,099-4,095-12,087-13,100-3, APBB1-050-11.

During verification of MT and Visual Testing of Anchor plate bearing blocks (APBB), this QA Inspector observed total of five numbers of castings fillet design did not meet the requirement of the approved shop drawing is identified as APBB1. The approved shop drawing specify that tapered length shall be 37.6 mm. The actual tapered length as measured by this QA approximately 45 mm. additionally at one location tapering done which is not

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specified on the shop drawing. The APBB' are identified as APBB1-069-16,069-4, 50-3,060-2 and 050-8 respectively. This QA Inspector informed to Lead QA Inspector of this issue, Lead QA informed to Caltrans (CT) design team. Further Decision will be taken by CT design team on this issue. Refer the attached photos for reference.

This QA Inspector randomly observed the following work in progress:

Shielded Metal Arc Welding (SMAW) welding of weld joint identified as DP3172-001-018. Welder is identified as 067520. American Bridge/Fluor (AB/F) QA is identified as Mr. Shen jian. The welding variables recorded by QA personnel observed appeared to comply with WPS: WPS-B-P-2212-TC-U4b-FCM.

SMAW welding of weld joint identified as DP3173-001-022. Welder is identified as 037779. American Bridge/Fluor (AB/F) QA is identified as Mr. Shen jian. The welding variables recorded by QA personnel observed appeared to comply with WPS: WPS-B-P-2212-TC-U4b-FCM.

SMAW welding of weld joint identified as DP3174-001-019. Welder is identified as 067611. American Bridge/Fluor (AB/F) QA is identified as Mr. Shen jian. The welding variables recorded by QA personnel observed appeared to comply with WPS: WPS-B-P-2212-TC-U4b-FCM.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.









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Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer